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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

MYALGIA AND ITS TREATMENT.

By J. B. MATTISON, M. D.,
of Chester, N. J.

Myalgia, strictly speaking, is the term applied to those very common and painful affections grouped under the head of muscular rheumatism, and known as lumbago, pleurodynia, and so forth, according to the muscle or muscles affected.

Doubtless, every practitioner is more or less familiar with these troubles, and though some of them may be comparatively trivial, as, for instance, the stiff neck produced by cold, and, being treated with domestic remedies, escape his professional attention, there are others, in which the actual suffering and incapacity for physical labor are so marked and so protracted that it becomes a matter of prime importance to remedy this state of affairs as speedily and effectually as possible.

It is not the purpose of this article to speak of the pathology of this disease, nor of its diagnostic points as compared with neuralgia, both features of marked importance, and for a full consideration of which the reader is referred to Dr. Anstie's admirable treatise on "Neuralgia and its Counterfeits," the latest and best work on the subject, and with which every physician should thoroughly acquaint himself if he be desirous of keeping fully abreast the times in the management of that painful affection.

We desire more particularly, to call attention to a plan of treatment which, in our hands, in all cases, has given more prompt and satisfactory results than any

other with which we are acquainted, namely, the subcutaneous injection of morphine.

Anstie, in speaking of the treatment of this affection, remarks, that keeping the affected muscle or muscles in a state of full extension, the maintenance of a perpetual local vapor-bath by spongio-pilin, and, if necessary, one or two Turkish baths, are all that is required in a very large number of cases. When these measures fail, he recommends the use of scruple or half drachm doses of muriate of ammonia, and adds, that "in the first very acute stage of a severe case it may be advisable to inject morphia hypodermically."

Now, the point we desire to bring prominently forward is, that it is not necessary to wait for a *severe* case, but that in *all* cases where professional assistance is desired the hypodermic employment of morphia, varying the dose according to the intensity of the suffering, and in the milder cases a very small quantity will suffice, affords more decided, and by far more speedy relief than any other mode whatever.

The result in the following cases will fully illustrate the value of this form of medication.

March 13, 1872, was called upon to visit R. P., farmer, age 45, whom I found confined to his bed from a severe attack of lumbago of four days' duration. Any attempt to assume an upright position gave rise to the most exquisite suffering, and even when the affected muscles were completely extended and fully at rest there was an intense aching, entirely preventing sleep, and causing much distress.

At the cost of great pain we succeeded in

getting him in a semi-prone position, and injected one-third of a grain morphia sulphate over the lumbar region. In seven minutes, *actual time*, patient was free from pain, and expressed himself as feeling perfectly comfortable. Visited him the next day, 12 M. Complete relief, with no unpleasant effect save a slight nausea, had continued for sixteen hours, allowing a night's refreshing slumber, and only returned, very much lessened, about one hour previous to my second visit. Injected one-quarter grain sulphate, and that completed the treatment, as the next day the patient left his bed, and the second day afterwards reported himself in the village three miles distant from his residence. He was most emphatic in his testimony as to the value of the remedy, and declared that after the first injection "he was never so happy in all his life."

H. M., set. 17, presented himself at the office, complaining of pain in the left side, much increased on full inspiration, and of several weeks' standing. An examination into the history of the case convinced us that it was myalgie, and an injection of gtt. v. solut. magend. was followed, in five minutes, by entire relief from pain, which did not return.

W. H., set. 35, applied for the relief of a pain of four months' duration, presenting the following peculiarity: When erect, either sitting or standing, no discomfort was felt, but the moment he bent forward, or elevated his feet above the level of his body, he began to suffer pain in the epigastrium, which constantly increased in severity until it compelled him to resume an upright position. He presented the appearance of perfect health, and a careful examination failed to discover the slightest evidence of gastric derangement. Regarding the case as one of epigastric myalgia, we injected gtt. viij. sol. magend. in the affected muscle. Saw the patient some hours after, and he expressed himself very much relieved, only slight pain being felt in any position. Circumstances of a business nature beyond control prevented his following out the plan of treatment, and he passed from under our observation. We have no doubt that the injections, had they been continued, would have resulted in a perfect cure.

Was called to visit Mrs. T., set. twenty-nine, mother of seven children, the youngest eleven months old. The following is her history. Two weeks subsequent to the

birth of her last child she was seized with a severe pain under the left breast, which has occurred at variable intervals ever since. Not a day has passed without more or less distress, so marked at times as to compel her for a while to abandon domestic duties. Her general health seemed good, and were it not for the local suffering she would consider herself a well woman. There was a sense of soreness in the affected region, and the pain seemed to be dependent in a great measure upon muscular action, movements involving the affected part always distinctly aggravating it. Sinapisms and other remedies had been employed without benefit. Considering the case myalgie in its nature, we injected gtt. iv sol. magend. deeply into the substance of the painful part. Called forty-eight hours afterwards and learned the injection gave marked and permanent relief, having felt no pain since its employment, an immunity from suffering she had not enjoyed for nearly a year. Made a second visit some time later, and found the freedom from suffering continued. Meanwhile she had engaged in more than ordinarily severe physical labor without any pain whatever, and having no further occasion for professional services the case was dismissed.

The foregoing are not culling cases. They are given in the order they occurred, and the results in all are, we think, such as to verify the statement made as to the value of the remedy employed.

Some doubts may be expressed as to the correctness of diagnosis in the last mentioned case, from the fact that one injection sufficed for a cure. The absence of any other manifestation of hysteria, past or present, will exclude the so-called "hysterical breast," while the want of any neurotic tendency in the previous history, and the fact that the pain was always distinctly aggravated by muscular movement will, we think, set aside any suspicion as to its neuralgic nature.

While claiming for the subcutaneous employment of morphia the decided preference over other forms of treatment, we by no means deny that cases may occur requiring additional measures. It is pre-eminently in those instances where the affection is strictly local that its curative virtues are so marked. When any evidence of anæmia exists, and the pain seems but part of a general mal-nutrition, tonic remedies, and especially the continued employment of cod-

liver oil, will be quite essential to effect a radical cure.

One point, in particular, we desire should not be overlooked, namely, *deep injections*. Plunging the needle firmly into the substance of the affected muscle gives us the benefit of *acupuncture*, which has been found exceedingly valuable in getting rid of obstinate myalgeic pain.

ON TONICS AND THEIR EMPLOYMENT.

BY THOMAS BARROW, M. D.,
Of Baltimore, Md.

The Tonics are by far the most numerous class of remedial agents.

With the exception of mercurials and alkalies, very nearly all the metallic remedies are tonic. The vegetable bitters and the mineral acids are also decidedly tonic. Physical exercise, pure air, and wholesome food and drink, are tonics of inestimable value. Tonic tinctures are also valuable. The proportion of alcohol (as George B. Wood, M. D., in "U. S. Dispensatory," ed. xii, page 1333, says) is so small as to produce no appreciable effect. Lager beer, however, and other alcoholic potations, when used as tonics, are liable to very grave objections. In states of depression, or too rapid absorption of decomposition, their value cannot properly be denied. Uncomplicated depression, however, may often be removed in a few hours, and even when complicated with fever, etc., they seldom require to be used constantly, but usually only occasionally. To elevate a debilitated person, however, to a condition of strength and energy, usually requires the constant use of the most efficient tonics during three or four weeks.

Lager beer, although I find it not unfrequently prescribed as a tonic, is by no means a very effective one. The chalybeates, strychnia, quinina, columbo, gentian, etc., are far more tonic than the hop. The nutriment contained in malt liquors is infinitesimally diminutive. The world-wide renowned Liebig analyzed a large quantity of the best Bavarian beer, and found that 365 gallons (about eleven barrels) of it contained only as much nutriment as two and one-half pounds of bread.

Not long since, upwards of three hundred London physicians, whilst admitting the usefulness of alcohol as a diffusible stimulant, denounced its being prescribed for habitual use, in consequence of its tendency

in this way to form the habit of intemperance, which leads to degradation, wretchedness, and misery, both during the present life and throughout eternity. Some years since, at a very large meeting, in England, of bishops and clergy, who met to consider what were the best means of imbuing the minds of the masses of the people with religious truth, it was unanimously admitted that the extensive prevalence of intemperance obstructed this desirable object more than any other cause whatever.

Liquor dealers, also, cling to their nefarious and destructive business much more tenaciously than formerly, in consequence of some physicians so often prescribing lager beer as a tonic.

Since the objects of medical practice are entirely benign, no physician ought to be willing to occasion present and eternal destruction to his fellow-creatures by leading them into habits of intemperance. Depression and debility are usually intimately connected. Feeble persons are often depressed, while persons in vigorous health are seldom so affected. The best means, therefore, in most cases, to relieve the depression is to remove the debility.

I regard malt liquors, etc., as possessing such feeble tonic powers that I have never prescribed them as tonics in a single instance. No reasonable objection, however, can be made to such preparations as tinct. ferri chlor., tinct. lavandula comp., etc., when used for tonic or corrective purposes.

On visiting Mrs. H. A. Elliott, about twelve years since, I found her almost dead from severe and protracted uterine hemorrhage. She presented all the characteristic features of the Hippocratic face. I asked her why she had not sent for Dr. M—. She replied that she was sure Dr. M— could not bring her through it, but she was sure that I could, and because that was my day to pass that way, she had waited for me. I prescribed—

R. Plumbi acetat, gr. xiv.
Opil, gr. vj. M.
Ft. pil. vi.
Dose—One pill every twenty minutes till relieved.

Two of these pills arrested the hemorrhage. I then prescribed—

R. Tinct. ferri chlor, fl. 3ij.
Dose 10 drops every two hours.

To relieve dyspnoea, prevent the recurrence of hemorrhage, and in some degree increase

her strength. These anticipations were fully realized. As an additional tonic, and to remove neuralgia, I at another time prescribed—

R. Ferri subcarb., $\frac{3}{ij}$.
Ext. belladonnae, gr. viij.
Pulv. columbo.
Pulv. zingib., aa $\frac{3}{iv}$.
Pulv. rheb., $\frac{3}{ij}$. M.

Dose—One-quarter teaspoonful three times a day.

Her neuralgia, from which she had suffered severely, was entirely cured within three days, and within two weeks from my first visit she was restored to the enjoyment of complete health. In a previous similar, although less severe case a physician attended her six weeks.

Mrs. Comfort Lefevre had suffered during two years with excessive debility and emaciation, headache, cardial palpitation, and depression, complicated with and aggravated by uterine hemorrhage. She told me that seven physicians had prescribed for her for these complaints, without much benefit. To arrest the hemorrhage, I prescribed—

R. Acid sulph. arom., fl. $\frac{3}{ij}$.
Dose—10 drops three times a day.

For the other indications I prescribed—

R. Ferri redacti, $\frac{3}{ij}$.
Ext. gentian.
Quin. sulph., aa $\frac{3}{ij}$.
Ol. tiglii, gtt. iv. M.
Et ft. pil lxxii.

Dose—1 pill three times a day.

I subsequently modified this latter prescription, thus:—

R. Ferri redacti, $\frac{3}{ij}$.
Ext. gentian, $\frac{3}{ij}$.
Strychnia, gr. iv.
Ext. coloc. comp., $\frac{3}{ij}$. M.
Use as previously directed by Dr. T. B.

She has repeatedly said she could not live without these pills. For nearly six years she has habitually taken one at night. If omitted a day or two, she feels so badly that she is compelled to use them again.

Mrs. Elizabeth Layton had suffered during two years almost exactly as Mrs. Lefevre, except the hemorrhage. Various prescriptions furnished to her by three physicians had afforded her some relief; but she was entirely and permanently cured within four weeks by means of:

R. Ferri subcarb., $\frac{3}{ij}$.
Pulv. columbo.
Pulv. zingib., aa $\frac{3}{iv}$.
Pulv. rheb., $\frac{3}{ij}$. M.

Dose $\frac{1}{2}$ teaspoonful 3 times a day in a little molasses and water.

Mrs. Adair had long suffered with general debility, which was aggravated during seven days by severe diarrhoea, with hemorrhagic passages. Of this latter malady she was completely relieved in twenty-four hours by means of:

R. Pulv. cupri sulph., gr. iiij.
Pulv. opii, gr. vj. M.
Et ft. pil. xij.
Dose, one pill every two hours till relieved.

I believe that I also gave her the same tonic mixture which Mrs. Layton had used, with similar effects. About one year afterwards, another attack promptly yielded to the same remedies.

Mr. Baumgardner had suffered during three months from hacking cough, debility, and emaciation. I prescribed:

R. Syr. senecæ,
Syr. ferri, iodid., aa $\frac{3}{ij}$.
Morph. sulph., gr. ij. M.
Dose one-half teaspoonful every three hours.

I also directed him, when the above mixture had been used, to take also the same combination which Mrs. Layton had used. Within one month he was, by these means, completely and permanently cured.

Mr. Wright, during six months, had several pulmonary hemorrhages, with hacking cough, emaciation, and debility. He, also, within one month, was completely and permanently cured by means of the same remedies which Mr. Baumgardner had used.

Mrs. Coppen had suffered during eight months from general debility, depression, palpitation, etc. She was entirely cured within one month by means of the same remedies which Mrs. Layton had used,

Mrs. Lydia Stokley had suffered severely during two years with all the maladies which Mrs. Coppen had complained of, which were complicated with, and aggravated by, prolapsus uteri. For the former, I gave the last prescription which I had given Mrs. Comfort Lefevre, with the addition of morph. sulph., gr. vj. For the prolapsus uteri I prescribed:

R. Acid tannic, $\frac{3}{ij}$.
Pulv. catechu, $\frac{3}{ij}$.
Butyri cacao, $\frac{3}{ij}$.
Ol. olivæ, $\frac{3}{ij}$. M.

Et ft. pessaries cylindrical, viij, each $1\frac{1}{2}$ inches long. Use one at night, twice a week, as directed by Dr. Thomas Barrow.

The injections and other remedies which had been prescribed for her had effected

but little good. By means of the use of the preceding remedies, she was very much benefited.

Mrs. Sarah Greenfield had suffered for thirteen years with prolapsus uteri, and for about one year with debility, neuralgia, etc. Within one month she was entirely and permanently cured of all these maladies by means of the pessaries which Mrs. Stokley used, and the last prescription which I had furnished to Mrs. M. A. Elliott.

Dr. Thomas H. Tanner, in his "Practice of Medicine," frequently advises the use of soluble medicated pessaries in almost every diversity of disease of the uterus, and its surrounding parts. In vol. 2, pages 776 and 777, he furnishes ten formulas of such pessaries, with the objects designated for which each is to be employed.

A REMARKABLE CASE OF COMPOUND AND COMMUNICATED FRACTURE OF THE SKULL.

BY WILLIAM BASS, M. D.,

Of Lowell, Mass.

Reported by R. B. Benner, Med. Stud.

Clarence J. Way, about twenty years of age, was employed by the Lowell Foundry Co., as a moulder. While bending over his work on the morning of Jan. 5th, 1872, he was suddenly struck by a mass of iron, weighing three pounds six ounces, making a shocking wound in the top of his head. The missile was thrown a distance of thirty feet, through a window near which Mr. Way was at work, from a machine for breaking up old iron. The injured man fell to the floor, and was immediately removed by his fellow-workmen. Dr. Bass was summoned, and found the young man unconscious, bleeding profusely, and greatly enfeebled by the shock and loss of blood. His hair was matted with coagulated blood. This was cut away, and an examination made, which revealed a fracture of the most serious nature. On making a conical incision, and turning up the flaps, the bone was found depressed and broken into three large fragments, besides several minor ones, involving the antero-superior angles of the parietal bones and the coronal and sagittal sutures, a little to the left of the median line, covering a space nearly as large as a silver dollar. The blood was pouring out from between the fractured pieces of bone in a way that, unless checked, would soon

deprive the patient of life, and every moment of delay lessened his chance.

The doctor at once took away the fragments with elevator and forceps, and found the longitudinal sinus extensively lacerated; indeed, in this situation there appeared to be no trace of it left. The dura mater was detached for some distance away from the circumference of the fracture, but did not appear to be wounded, and the brain depressed from a half to three-quarters of an inch. Ligating the ruptured sinus was simply impossible, and pressure seemed the only feasible course. This was accordingly done. The doctor placed a sponge tent between the dura mater and the inner table of the skull, as near the mouth of the bleeding vessel as possible, and this had the desired effect of stopping the venous flow. Thick compresses were now placed over the wound, with the flaps turned up from the edge, the head dressed, and the patient removed to his home.

During these operations Mr. Way became conscious, and asked several questions relative to the injury.

Diluted brandy was given him at intervals, which considerably revived him. After reaching his home he was placed in bed, and strict quiet enjoined upon all. Some invigorating tonics were ordered, and he was allowed a light, nutritious diet. This happened on Friday. On the day following the wound was examined. Suppuration had commenced. The sponge had not moved from its position, but was pressing with considerable force upon the brain. On Sunday another examination was made, and the sponge found to be saturated with pus. There was imminent danger of its helping to extend the inflammation to the dura mater. Partly on this account, and partly from the unfavorable result which might follow from the pressure on the brain, the Doctor decided to remove it, hoping a sufficient coagulum had formed to arrest the bleeding.

By working it gently from side to side, and drawing upon it lightly, it was taken out entire, but not without the result that was feared; for as soon as the sponge was removed the bleeding was renewed.

By the Doctor's order, another sponge was saturated with a solution of tannic acid and glycerin, which he replaced within the cavity, but not quite as far forward as before, to

facilitate its removal. The head was dressed, as before, and for five days the sponge was left untouched. The dressings were removed, and an antiseptic wash of potasse permanganas applied twice a day. At the end of this time the Doctor, deeming the danger of removing the sponge as less than the danger of its remaining, on account of the accumulating pus endangering the dura mater, concluded to take it out, but in a different manner from the first attempt.

At first he loosened the part of the sponge nearest the external wound, and snipped away a small portion with scissors. This plan was followed for six or eight days, at the end of which time the last piece was taken out, with no bleeding.

From this time the wound assumed a more healthy appearance; granulations were observed on the surface of the dura mater, and the brain resumed its normal position. There were several partially detached points of bone jutting from the inner edge of the fracture, but they were left to exfoliate, in view of the danger of disturbing the parts, and thus renewing the hemorrhage.

All this time the patient's general health was improving. His appetite was remarkably vigorous, and digestion good. The head was dressed two or three times a day, and small fragments of the bone removed from time to time, as they appeared on the sur-

face. The wound continued to do well, filling out to near the surrounding surface, and Mr. Way is apparently as well as ever.

From several considerations, this must be regarded as a remarkable case. Nearly all the usual concomitants were absent. There was the compression of the brain by the injury, and continued by the sponges, for nearly two weeks, with no symptoms of a comatose or apoplectic character. Mr. Way's mind was unaffected. It was not even confused, with the exception of a few minutes immediately following the accident. There was no discoverable wound of the dura mater, despite the heavy blow received and the ragged nature of the fracture.

After the first fortnight the patient slept well. There was no heavy breathing or unnatural drowsiness, or dilatation or contraction of the pupils. There was some constipation for a few days after the accident, but this was relieved by a mild cathartic. Slight retention of urine the third or fourth day, but this symptom steadily subsided. No delirium or local convulsions. Recovery progressed favorably, and naturally, without a single drawback excepting the venous hemorrhage. The treatment was sustaining, from the necessity of the case, throughout. Potassie permanganas was the only external application used, and this exerted a most favorable influence both as a styptic and antiseptic.

EDITORIAL DEPARTMENT.

PERISCOPE.

Experiments in Electro-Therapeutics.

Drs. BEARD and ROCKWELL report the following experimental use of electricity, in *The American Practitioner*:

HYSTERIA AND ALLIED AFFECTIONS.

Among the affections allied to hysteria is neurasthenia, a term which we have devised and applied to what is called nervous exhaustion—a condition where exhaustion is the leading feature—uncomplicated with any special organic lesion. One case of neurasthenia, with a full pulse of 115, was greatly improved by general faradization. A case of hysterical mania in a woman aged fifty-five, with symptoms of anæmia—constipation and delusions of various kinds, such as fear of the police, etc., all of six

months' standing—was so much benefited by general faradization alone that after the tenth application she seemed to be entirely restored; but she soon relapsed, and treatment by general faradization was again employed. Under this she made progress, but slowly. Galvanization of the brain and sympathetic, however, brought her up to pretty nearly the standard of health.

Another case, a woman aged forty-five, who had been debilitated by a two years' siege of intermittent fever, and who presented the symptoms of globus hystericus, hysterical paralysis of the right arm, and melancholia, was so much benefited by twenty-five applications of general faradization that she was able to return to her duties as servant-girl. The melancholy was cured, and also the hysterical paralysis of the arm. Her pains were relieved, the bowels regu-

lated, and the appetite increased by the tonic effects of the treatment.

A case of chlorosis in a girl of eighteen, with the symptoms of yellowness of the skin, irregularity of menses, and general debility, was greatly benefited by general faradization. Two other cases of hysteria, with the symptoms of *globus hystericus*—nervous trembling, fits of crying, flashes of light before the eyes, and nervous twitchings of the muscles—were rapidly improved by general faradization.

It is a noteworthy fact that while neurasthenia, neuralgia, chlorosis, and many other affections allied to hysteria, are more frequent among the higher orders, hysteria itself is quite as common among the ignorant or servant-girl class, in whom the emotional nature reigns pretty nearly supreme, unchecked by reason, or education, or common sense.

NEURALGIA.

Of neuralgia, uncomplicated, but two cases were treated. A case of sciatica was apparently cured by three local galvanizations. A case of neuralgia of syphilitic origin was but slightly benefited by local galvanization, was made worse by central galvanization, and somewhat improved under general faradization.

We remark here that the statement made by some European writers of ability, that the faradic current is useless in neuralgia, is contradicted by the experience of scores of physicians in this country, who are every day relieving or curing cases of true neuralgia of a central origin by faradization alone.

RHEUMATISM.

Of the various methods of application employed for rheumatism, general faradization seemed to accomplish more than localized galvanization of the joints, and very much more than central galvanization. This would show so far forth that rheumatism is not so directly under the influence of the central nervous system as some other diseases. Rheumatism is, however, a constitutional disease, whatever its pathology may be, and merely local electrization of the affected joints is not satisfactory. It may relieve that particular part, but it does very little toward eradicating the disease.

General faradization favorably affects rheumatism in several ways: 1. By its stimulating tonic influence over the whole system. 2. By the relief of the local manifestations. 3. By modification of the urinary secretion.

Rheumatism is benefited by tonics of various kinds, as quinine, iron, etc., and general faradization acts as a tonic. By the special influence that it exerts on the liver and all the organs of digestion it greatly assists the cure of the forms of rheumatism that are at all curable. We have seen cases where the secretion of urine was greatly increased after a single application of general faradization; but the cases where such increase is demonstrable are not very frequent.

Muscular rheumatism is the type that gives way most readily to electrical treatment. Next to that the subacute articular variety offers the best chance of benefit; and last of all come the very chronic forms, where the unfortunate patient is, as it were, tied up in knots from long-standing affection of the joints of the upper and lower limbs. It is not pleasant to treat these latter cases. They appreciate, it is true, the tonic effects of the treatment in a general way, and that is about all. It is possible that localized galvanization, prolonged for hours or days by means of apparatus placed at the bedside, might compel these maladies to give way; but we have never yet brought this idea to the full test of experiment. The most hopeless forms of rheumatism are those which simulate *arthritis nodosa*, or rheumatic gout, if indeed they are not actually that disease. It is possible to do but very little for such cases.

PARALYSIS.

Of paralysis of different kinds we treated five cases, four peripheral and one infantile. These cases behaved as cases of paralysis usually do under electrical treatment, and upon this subject we have little that is new or suggestive to communicate. We simply remark that it is a mistake, and one that is often made, to use too strong currents and too long applications. A current just sufficient to produce muscular contractions is preferable. The earlier this form of paralysis is taken under treatment the better. It is delay frequently that makes it require protracted treatment.

DYSPEPSIA.

Six cases of dyspepsia were treated, five of which recovered and one was improved. The leading symptoms in the above cases were pain after eating, nausea, vomiting, pyrosis, constipation, anorexia, flatulence, and mental depression. The methods of treatment employed were general faradization, galvanization of the sympathetic, and pneumogastric and central galvanization. Very few diseases yield so surely to any remedy as nervous dyspepsia yields to electrification, the exceptions being those cases where from some peculiarity of constitution electricity is not well borne.

BRONCHITIS.

Five cases of bronchitis were treated. Of these one was much improved by five weeks' treatment with central galvanization; another case, complicated with phthisis, was considerably benefited in a general way by persevering treatment; another case was benefited for a time; and the fifth case, complicated with phthisis, was improved. None of the cases were perfectly cured, and those complicated with tubercular disease will doubtless die; and yet the electrical treatment of phthisis is not wholly a failure.

The method we adopted in cases of tubercular deposit in the lungs was to apply a mild galvanic current directly through the

diseased region, with a view to cause absorption. In the experience we have had with this method up to date we have had no satisfactory evidence that absorption of any great amount is caused by such treatment; but through the influence on the sympathetic and spinal cord, directly and indirectly, very much benefit is derived that deceives the patient and perhaps the physician.

ASTHMA.

Of asthma two cases were treated. One of these, a woman of middle life, had for three months suffered from the disease, brought on, as she said, by the smell of cooking. Galvanization of the sympathetic and pneumogastric at once benefited her, and in two weeks she was apparently cured, and we have not since heard from her. This is the best result that we have ever seen in asthma. It may be accounted for by the recentness of the attack; and the query occurs at once whether the majority of cases might not be cured if they were taken early, before the asthmatic habit had become engrafted into the system. The other case, a man aged fifty, had suffered for five years. His distress was very great, and the attempt to walk half a block caused a feeling of suffocation. One seance of five minutes gave him such positive relief that he was able to walk home, a distance of one mile. He did not return for treatment.

Asthma, so far as electrical treatment is concerned, would appear to come in the same category as facial spasm, blepharospasm, and other similar local spasmodic affections, which when recent and mild are very easily cured, but when long-existing and severe are susceptible only of temporary relief.

INTERMITTENT FEVER.

Three cases of intermittent fever were treated. Electricity is prescribed for those subacute or chronic stages of intermittent fever where the patient is able to go about, but is debilitated, and is liable to frequent or even daily attacks; not as a specific at all, for electricity is not a specific for anything, but as a general stimulating tonic.

SPINAL CONGESTION.

Of the cases that were treated in the dispensary one came twice, and was not benefited; one came three times, and was so much relieved that he came no more; one case, where paralysis of motion existed, was cured after two months' treatment; one case, after four applications, was very much helped; and still another case of an aggravated character was by two months' treatment (seventeen applications) so much benefited that the patient believed herself cured, until one day she walked a long distance, became exhausted, and the old symptoms appeared in full force. A second course of treatment again relieved her.

LOCOMOTOR ATAXIA.

Of locomotor ataxia (posterior spinal sclerosis) one case was treated, and mainly by

galvanization of the spine and central galvanization. The benefit derived from a few applications was slight, and the patient did not return.

In regard to this disease there are two considerations of great importance: 1. That cases of simple spinal congestion or irritation are frequently called locomotor ataxia. 2. That when the process of degeneration of the posterior columns of the cord has actually set in, with the necessary body of symptoms that accompany such degeneration, perfect recovery is very rare under electrical or other treatment. In Europe, and especially in Germany, the so-called functional or milder disorders of the nervous system are much less frequent than with us, and hence physicians there are not prepared for them when they occur, and are apt either to ignore or mistake them. Even in the most recent German works, and in some of the medical journals of that country, we see cases of spinal congestion of a not very severe form mistaken for spinal sclerosis, and gravely reported as cured by hydro-therapeutics or electro-therapeutics, or by nitrate of silver.

Now, in regard to the electrical treatment of locomotor ataxia, our experience is that grateful relief or cure of some of the symptoms and decided general benefit is derived from it. Remissions and improvement that are greatly encouraging to the patient, and perhaps deceive the physician himself, occur; but never a perfect or an approximate cure, except in the early stages. The relief of the pain is very desirable, and this we may accomplish by central galvanization or general faradization; and it may be here remarked that some of the best results of the treatment of locomotor ataxia that we have seen have been accomplished by general faradization, either alone or alternating with galvanization of the spine.

ADDISON'S DISEASE.

A woman that presented the bronzed-skin appearance of Addison's disease was treated for one month by general faradization with benefit as regards her general symptoms. In private practice, in a case of undoubtedly disease of the suprarenal capsules, where the diagnosis was made by Prof. Austin Flint, we have demonstrated that general faradization and galvanization of the sympathetic, although powerless to effect a cure, are followed by results the most gratifying, so far as improvement in the general condition of the patient is concerned.

DISEASES OF THE SKIN.

What has been learned in the electro-therapeutical department of the dispensary in the treatment of diseases of the skin is itself a sufficient reward for all the expense of inaugurating such a department, and for all our professional labors there from the beginning until now. Dr. Woodruff, one of the physicians in charge of the skin class, has shown great interest in our investigations by sending in cases, and thus given us opportunity of testing the various methods

of application in a department which now promises to be one of the most satisfactory of all the special branches of electro-therapeutics. We had previously experimented in the electrical treatment of some of these diseases, in connection with Dr. Piffard, at the dispensary for diseases of the skin, and also in private practice by intervals during the past three or four years.

Eleven cases in all of diseases of the skin were treated in the electro-therapeutical department; six cases of chronic eczema, and one case of each of the following diseases: psoriasis, erysipelas, syphilitic tubercle, favus, and superficial ulcer. All the cases of eczema that persevered (three in number) recovered. The case of psoriasis did not persevere, the case of favus was not benefited, and the ulcer was cured. It was here that we first demonstrated the immediate and sometimes permanent relief of the pain, itching, and burning with which eczema and other diseases of the skin are so often associated.

TUMORS.

Of tumors ten cases were treated, as follows: two cases of scirrhus of the breast, one of epithelioma of the lip, two of uterine fibroid, four of goitre, and one cystic tumor. The goitres were all reduced in size more or less by the use of the needles; but none have yet been entirely cured, although some of them have been treated with great perseverance and by all varieties of applications, by catalyzation—that is, by external applications with sponges, by one needle or by many needles—with and without ether, and by ether spray. Goitres do not rapidly disappear under electrization. In many cases, like fibroids and other tumors, they grow smaller under the treatment up to a certain point, when they hang fire, and will not budge an inch further.

It is, of course, possible to destroy any tumor that is accessible by electrolysis, provided a sufficiently strong current be used, and sufficient time be given to it; but then the question must always arise whether the disease or the remedy is most to be dreaded. For malignant growths the choice is easy. For benign, painless growths, like small goitres, it is a question whether they are worth the pain and annoyance of an operation of any kind.

THE METHOD OF WORKING UP THE BASE.

The epithelioma of the lower lip was destroyed, root and branch, by a method of electrolyzation that we have recently employed, and which we call *working up the base*. This method consists in inserting the needles around the tumor and partly into the healthy tissue, so as to undermine the former and cut off all communication between it and the healthy tissue. This method is followed by complete sloughing of the growth, granulations, and healing. The usual and accepted method of electrolyzation is to insert the needles directly into the tumor.

The method of working up the base or undermining the tumor has the advantage that it is more thorough, since it makes sure of the complete destruction of the growth; that it is shorter, since it wastes no time on the body of the tumor, which really is of no consequence if it be separated from the healthy tissues; and that it insures a more satisfactory healing.

Tic Douleureux Treated by Galvanism.

Dr. JAMES T. WHITTAKER, writes to *The Clinic* as follows:—

A little more than a year ago I published the details of a most aggravated case of Tic Douleureux* of many years duration, which was cured by the daily application, for two weeks, of the constant current of galvanism. In the presentation of this case I made the following reservation: "The publication of this case of trifacial neuralgia is perhaps premature. The marked improvement, however, which has gradually established itself, justifies the conclusion that the change already effected is due solely to the local treatment, and that it will continue to perfect recovery." This conjecture met with full justification. But one week more was required to establish a perfect cure. Perfect but not permanent.

One whole year passed away during which time I neither saw nor heard of this patient. The presumption was safe that he was free from pain. On August 12th, 1872, he again presented himself with the statement that he had been absolutely free from attack until about one week ago. He had become thoroughly wet through while working in the rain, but felt himself in such a condition of health that he had adopted no precaution in protection from its effects. On the next day he felt "a touch of the old pain." This touch had repeated itself every day during the past week, and now showed a decided tendency to recur more frequently. "It was coming back on him as at first."

The same treatment was of course resorted to. One electrode (Siemen's and Halske's battery, eight cups) was applied behind the ear, the other was placed about the face with longest contact over the supra and infra-orbital foramina. As at first the application was decidedly pleasant. In four days (five minutes' sessions) he was well again, whereupon he returned to his work.

On September 1st he again presented himself. While at work under the blazing sun a few days ago, he suddenly experienced a "twang" of the old pain. Yesterday and to-day the spasmodic exquisitely painful twinges had seized him again. I had the opportunity of observing one of these attacks just as he was entering my door. A sudden spasm convulsed the left side of his face, he dropped his head between his hands and at once commenced a rasping friction of the affected side which would have soon denuded the skin had the pain continued long.

* Cases in Galvano-Therapy, *The Clinic*, Aug. 13, 1871.

The conjunctiva was deeply suffused at once, the face flushed, the mouth dribbled saliva. Galvanism was applied at once, and the relief of pain was so great under its application as to draw from him the liveliest expressions of gratitude. The pain ceased to recur after the second day. As late as September 10 there was still experienced a sensation of burning about the orbital circle, but at no time a regular attack of "twitch or twinge."

To-day, September 12, there is no abnormal sensation whatever. The eye has recovered its normal appearance; the pruriginous eruption, always present during the existence of the disease, has vanished; the senses of smell and taste, always impaired by the trophic lesions associate with trigeminal affections, are fully restored; the whole side of the face has recovered the aspect and functions of health. Among the most satisfactory phenomena produced by the cure is the improvement in his mental condition. The agonizing suffering of the seizure kept him during the period of liability constantly alert for the coming pang. Pain had made him a coward. It was a long time after the first relief before his countenance lost this expression of dread and fear. He returns to treatment now, on recurrence of the disease, with perfect confidence of cure. Despair has been substituted by hope.

In reporting the case of Niemeyer, which has now become celebrated, where "surgery and electricity had both a fair trial," Althaus left it an open question whether the effect of the galvanism would be more permanent than that of the surgical operation. He expressed the belief that the continuous current would be preferable to neurectomy in all cases. "In the first instance because it does not injure or destroy the nerves which are necessary for the proper nutrition of the face; and secondly because it has the power of completely altering the nutrition of the affected nerves, owing to which it probably produces more permanent effects than neurotomy." He believed then that "if a relapse should occur the same remedy would again produce the same effect."

The instance of this engineer, as reported, adds another to the swelling list of confirmatory cases.

Electricity in the Treatment of Malignant Tumors.

Dr. J. S. C. GREENE, in the *Boston Medical and Surgical Journal*, writes in reference to late statistics on this point:-

Among the sarcomata reported are the two first tumors treated by electrolysis. Each was larger than an apple, and each was destroyed in fifteen minutes, at a single sitting. A sarcoma epulis as large as a pigeon's egg was, in seven minutes, destroyed down to the bone. No fever, and but slight local reaction followed. On the thirteenth day the tumor, with a small lamella of bone came away, and cicatrization was rapidly completed.

Of the cases of cancer the majority were very extensive, some, indeed, quite hopeless. Of the whole number, however, thirteen were successfully operated on, two were discharged from hospital improved, and two without any improvement. Of these one was a patient who refused to submit to a completion of the operation because of the pain, anesthesia having been but incompletely produced (no uncommon occurrence in Vienna operating theatres, a tacit confession of the distrust with which chloroform is regarded), and one died of intercurrent disease during the time of treatment. In the cases of most extensive disease a very powerful current was employed, under anaesthesia, usually in a single sitting, with one reapplication to suspicious spots. In other cases anaesthetics were not employed; the current was used as strong as the patient could bear it, and the operation was protracted to four or six sittings of from fifteen to sixty minutes.

In a case of cancer of the rectum, involving the vicinity of the orifice externally, and extending upwards from the anus two inches, and sharply defined above, the patient suffered from pains so severe that even large doses of morphine injected subcutaneously could only temporarily palliate it. At the same time a most penetrating odor was disseminated. In the first sitting the external part alone was attacked, and in forty-two minutes it was destroyed. No anaesthetic was used. The pain from this time became so much less that the patient required no more opiates, and the offensive odor ceased to give further annoyance. The slough separated on the fifth day. Three days later the internal infiltration was submitted to treatment. The sloughs separated soon, and the general health of the patient improved so much that in less than seven weeks from the date of the second operation he was discharged well. The subsequent history of this case is not given.

In three cases it was possible thoroughly to destroy carcinoma which was so intimately connected with the inferior maxilla that, had it been operated on by the knife, resection of that bone would have been necessary. In another case of epithelial cancer of the lower lip, the swelling of the submaxillary glands of both sides, which were largely infiltrated, entirely disappeared after the destruction of the primary disease by electrolysis. The same phenomenon was observed and reported by Dr. Neftel, of New York, in a case of recurrent cancer of the breast, which had been previously twice removed by excision.

It is worthy of note that neoplasms have been frequently observed to grow much more rapidly under the stimulus of too weak a current, which had been employed with the intention of destroying them.

These may serve as illustrations of some of the advantages of electrolysis as a means of operation. Besides, it should be observed that there is complete absence of loss of

blood, and of all reaction due to such loss. Indeed, as a means of arresting bleeding from an artery which is inaccessible to ligatures, nothing can be neater or more efficient than to pierce the vessel with a needle just above the bleeding point, the needle being connected with the positive pole of a battery, the negative pole being, of course, also brought into connection with the body near by.

So free from risk is the application of electrolysis that Benedict reports a case in which he introduced a long needle into a fibroid tumor of the uterus through the abdominal walls; no general reaction followed, and the local reaction was quite insignificant. So completely free from all formidable features is it, if performed under ether, that electrolysis may be employed, even if only as a palliative operation, in many cases where it can at least afford relief from painful and distressing symptoms, and render a prolonged life supportable, when operation by the knife might be refused by the patient, or, indeed, might involve so many chances of an unfavorable result as to forbid the surgeon's advising it.

On the other hand, the expense of a battery fitted for electrolytic operations is not inconsiderable; such a battery is with difficulty transported, and with the batteries hitherto used the time which such operations require is relatively somewhat long. Perhaps still more powerful batteries, or the simultaneous use of more than one for different parts of a tumor, might obviate this last disadvantage.

Dust as an Exciting Cause of Disease of the Air-Passages.

Dr. WM. H. BENNETT says, in the *Medical Record* :—

My attention was first called to this subject by the following observations: I noticed that many persons with chronic nasal catarrh instinctively shunned dusty localities. And in making rhinoscopic and laryngoscopic examinations, I several times discovered the superior pharyngeal space and interior of the larynx covered in places with a coating of dust and mucus, which, on being removed, exposed to view an irritated and not unfrequently an ulcerated condition of the membrane beneath. I found many individuals with slight catarrhs suffered no inconvenience whatever while residing out of the city, but on coming to town they were always made very miserable, except in wet weather or when the streets were well sprinkled, by the sensation of burning and dryness which the dust produced.

It is easily understood that the finer and lighter the particles of matter, the more readily and more deeply they will penetrate the air-passages. In my opinion it is the finer dust which does the most harm; for although upon being deposited it causes less irritation than the coarser variety, yet it remains longer upon the membranes, mixed with the secretion, and hastens decomposition;

while particles of any magnitude do not ordinarily get farther than a short distance into the nasal cavities, and they excite sufficient irritation to be almost immediately thrown off. Under favorable circumstances the finer matter may remain in the air-passages some time; i. e., when the secretion is scanty and viscid, or when the epithelium is wanting. I have collected from the larynx of a living subject immediately after a thirty-six hours' rain, a black deposit which proved to be composed of minute particles of dust. This may possibly have been inhaled in-doors, but I do not think such an explanation probable.

The time required for the production and fatal termination of that form of pulmonary disease known as stone-cutters' consumption, knife-grinders' rot, bronchial phthisis, etc., depends *ceteris paribus*, altogether upon the composition and nature of the matter inhaled. Thus, knife-grinders who grind on dry stones are affected and die sooner than stone-cutters, and these latter succumb sooner than those that work in cotton factories and rope-walks. Now this is exactly what we would expect; for the patient in the first instance is exposed to a very fine dust, which penetrates deeply into the air-passages, and the particles are exceedingly sharp and angular, irritating to the utmost degree. While in the two latter cases, although the atmosphere breathed is more heavily laden with particles of matter, they are softer, coarser, and do not so readily scratch and penetrate the tissues with which they come in contact. However, the atmosphere of all large cities, and of the city of New York in particular, contains dust of every description, and of the foulest and filthiest kind. We get the fine sharp particles which are ground from the pavement, as well as the earthy and organic matter; and the scavengers do their part to make the situation worse by leaving in the gutters a good share of the ashes and garbage which should go to the dumping-grounds. Decomposing vegetable and animal substances, together with the excrements of the numerous animals which crowd our streets, furnish a share of what is taken in with every breath of air. There is plenty of food upon which germs may subsist, and a rich soil for them to multiply in.

The most of the dust inhaled is deposited on the Schneiderian membrane, in persons who breathe as they should, through the nose; but much of it reaches the pharynx, and some of it gets into the larynx; of this we have positive proof. And although we cannot demonstrate in the living subject that any of the suspended matter reaches the bronchi, we have every reason to suppose it does. We know it does in those cases where the atmosphere breathed is excessively charged, and it must under ordinary circumstances, only in a less quantity. Now, granting this, does it not claim our attention in cases of pulmonary consumption? Not only are the paroxysms of coughing increased in frequency and violence, but,

supposing the irritant to penetrate to the affected parts of the lungs—as, for instance, where a vomica communicates with a large bronchial tube—is it not reasonable to suppose sufficient irritation might thus be produced, by the entrance of dust particles, to cause the disease to extend where otherwise cicatrization would have taken place?

But the parts which most suffer from contact with the dust are the lining membranes of the nose and pharynx. They filter the air which passes over them of most of its suspended matter, and consequently are subjected to the greatest amount of irritation. In many cases of catarrh the nasal passages are so narrowed, from swelling of the mucous membrane which lines them, that the patient is obliged to breathe in part or altogether through the mouth; and here the lining membrane of the larynx is equally exposed to the influence of the dust.

On Veratrum Viride as a Hemostatic.

Dr. J. W. COLLINS says, in the *American Practitioner*:

The action of veratrum viride as an arterial sedative of very great power, and of especial value in the catarrhal phlegmasiae, as well as in many other diseases attended by excessive and forcible action of the heart, is perhaps sufficiently understood, by American physicians at least; but I have nowhere seen any mention of the power of the remedy as a hemostatic. Yet, after an extensive use of the drug in different forms of hemorrhage, I am thoroughly satisfied that it possesses the property in a very remarkable degree. I esteem it the promptest as well as the most reliable of all our means for controlling both active and passive hemorrhage.

The first case in which I had occasion to test the hemostatic powers of veratrum was one of hemoptysis, which had resisted all the usual remedies, but yielded almost at once to five drops of Norwood's tincture, given every hour for six hours. It is worthy of remark that the tolerance of the drug was very striking in this patient, the large quantity given having produced neither nausea nor other unpleasant symptoms. The next case was one of aneurism of the left subclavian artery, the result of an injury to the vessel in its second part, or just behind the scalenus anticus muscle, from the small blade of a pocket-knife. The tumor was about the size of a hen's egg, and involved all the second portion, and probably the first also, of the vessel. It was accompanied by the characteristic thrill, pulsation, pain in the shoulder and arm, absence of radial pulse, coldness of the limb, etc. Not deeming an operation advisable, and digital or other compression being impossible, I determined to give the veratrum, in the hope that it might so lower the action of the heart as to favor the formation of a coagulum in the aneurismal sac. I began with five drops, increasing the dose by one drop every third hour, until the full sedative effect of the medicine was produced. I continued it,

in doses of from five to twelve drops, for ten days, at the end of which time the tumor had almost entirely disappeared, a small, hard lump only remaining, with very slight pulsation, no pain in the arm, no thrill, and considerable pulse at the wrist. The patient, a stout young negro, thinking he was well, quit me, but returned at the end of two weeks, with most of the symptoms as well marked as at first. I put him on the same treatment, and continued it for fifteen days, the last six days merely to make sure of a cure, for the tumor, with all the attending symptoms, had disappeared, the radial pulse had become normal, and the natural temperature of the extremity restored. At the end of twelve months I saw him again, when he informed me that he had been uniformly well.

What results might be obtained in aneurism from the veratrum, used in conjunction with compression and flexion, time must determine, my own opportunities for observing its effects being limited to the foregoing case.

In epistaxis, seemingly independent of the cause which gave rise to it, the veratrum has been in my hands uniformly successful. It has been equally so in menorrhagia, active or passive. In a case of secondary hemorrhage, occurring on the third day after amputation of the cervix uteri, I believe the remedy saved my patient's life. It has unfailingly arrested the hemorrhage which has occurred in two cases of uterine carcinoma now under my care, and in one of these without at any time producing the least nausea. Indeed, the control which it exercised over the floodings, which had previously worn the patient almost away, has allowed her to actually gain in both flesh and strength, and awaken in her mind the delusive hope that she will recover.

My friend, Prof. J. T. Gilmore, of Mobile, informs me that, at my suggestion, he used the veratrum with entire success, after other means had failed, in a secondary hemorrhage following amputation of the thigh; also in a case of epistaxis, which was so obstinate as to threaten life. Dr. Gilmore further says that the veratrum, given in doses of fifteen drops, is regarded by the profession in Mobile as being the most efficient remedy in certain cases of puerperal eclampsia. I myself have not had an opportunity of using it in such conditions, but do not for a moment doubt that it would prove a most reliable agent in a certain class of these cases. I have seen the best results follow its use in the periodical hemorrhages which occurred in two cases of placenta previa.

My single object in communicating the foregoing has been to call the attention of the profession to the veratrum as a very powerful and very reliable agent for the arrest of hemorrhage, both active and passive. It should be given in doses of from three to fifteen drops, repeated every one, two, or three hours, according to the urgency of the case, always carefully watching its effects.

Gunshot Wound of Stomach and Kidney.

The following case, reported by J. W. BROOKS, M. D., in the Chicago *Medical Journal* has some unusual interest:—

Dec. 31st, 1871. W. C., about 30 years of age, had taken an early breakfast, and with his brother had been engaged in completing a job as carpenters. Was in the possession of uniform good health. I think had served some three years in the Union army during the war of the rebellion. At 11 o'clock they returned to their boarding house to make up their bills. He very soon discovered a Derringer pistol, carrying a half-ounce ball, lying in a drawer near him, took it, blew into two or three of the muzzles, withdrew it, and pointed it towards the stomach. His brother remonstrated; he replied, no danger, and at that instant one barrel discharged (it being, I think, a six-barreled one), taking a downward, backward, and slightly lateral direction. He staggered, partly falling on a bed, rallied to his feet, ran down stairs, and sank on a lounge. In five minutes the writer saw him. There was great nervous shock; the skin cool, clammy and moist; prostration great; constant nausea; pain in the stomach; restlessness; respiration feeble, and some thirst. Surface wound about two inches to the left of the centre of the sternum, having cut the size of the ball from the lower edge of the cartilages of the false ribs. Directed him removed to an upper room, and laid recumbent, head low, a cloth wrung from hot water to be placed over the wound, and to be kept constantly applied, small pieces of ice (as large as a small fibbert) placed in his mouth. Imperative orders that no instrument touch the wound, bottles of warm water to the feet, absolute rest. 8 P. M., no reaction, very restless, much nausea, pulse not improved. Gave one drachm of opiate solution (prepared from the dregs of opium that had been used in the preparation of officinal tinct. opii), with tartaric acid, with directions to repeat in two hours, if necessary, which was twice done. 8 P. M., still sick at the stomach; no reaction. At 8.15 P. M., vomited between one and two pints of coagulated blood; at 9.10 P. M., passed about three pints bloody urine, resembling the blood that flows from the vein of an individual killed by lightning; a fourth drachm was now given. At 10.20 P. M., reaction commenced feebly; from 11 P. M. to 3 A. M., slept quietly, and on awaking vomited a large quantity of blood, which was the last blood vomited; at 4 A. M., passed an ordinary urinal half full of fluid, mostly blood; from this time he urinated about once in six hours, blood always passing till the fifth day, when the urine was of a natural color and quality.

After the first sixteen hours he had no pain whatever, and slept well every night. At the expiration of forty-two hours he was allowed one teaspoonful of iced milk, in four hours two teaspoonsful; this was gradually increased till on the fifth day he was allowed one-third of a tumbler of the iced milk

every six hours. Not an untoward symptom occurred. The hot cloth wet was kept applied up to Jan. 8th, 1872. No other medicament was used. The fourth day the bowels moved naturally. On Jan. 8th, he was removed to his home in the country. On or about May 1st he returned to the city, and followed his occupation as a carpenter. On examination the 7th of May I found the ball under the skin, about two and a half inches from the spinous processes of the vertebrae, and nearly outside the eleventh rib of the left side, having passed out of the abdominal cavity between the eleventh and twelfth ribs. The direction of the ball, the vomiting of blood, the passing of blood by the urethra, the character of the shock and prostration, point unmistakably to the cutting of the stomach and left kidney by the ball.

New Method of Prescribing.

Mr. JEAN PAUL BONSIEUR says in *The Clinic*:—

The present mode of prescribing is not characterized by the simplicity and accuracy modern science demands; and as the cumbersome apothecaries' system cannot be thrown out and the French decimal method adopted without an entire revolution, it behooves us to simplify the process as much as possible. For that purpose I would suggest what may be called the one dose prescription plan, i. e., to write only as much of each constituent as shall be required in each dose; these can then be left to be multiplied by a common multiple, placed on the margin, for instance:

R. Ferri redacti, gr. j.	Quin. sulph., gr. ss.	Ext. gentian, gr. j.	} X. 12.
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The prescription will always be understood to be a dose, the only directions required will be the intervals between each dose.

I will enumerate a few of the advantages of this method over the old plan.

It is the safest. The menstruum may be left out with perfect impunity; conceive such a lapsus mentis with the present mode; and yet such an error is by no means rare. Again circumstances often render almost impossible the elaborate computation of a compound prescription. What is the consequence? Mistakes are continually being made, and were it not for the vigilance of the druggist the most disastrous results would sometimes follow. If, however, he should use the single dose method, knowing of course the properties and dose of each drug, he can exactly adapt the quantity to the therapy of the particular case; he can review his prescriptions and see that no constituent is inordinate; can judge better of the modifying action of each drug on the others. To avoid the dangers of original prescribing, there is a reprehensible method much in vogue now of using ready-made prescriptions—of having a set of formulæ ready for all emergencies—of fitting the pa-

tient to the prescription, instead of the reverse. To supply this demand we have books gotten up on the ready-reckoner type, all the prescriptions ready compiled and arranged under the name of each disease. The above assertions can all be verified by the examination of druggists' files in the city as well as in country towns.

The economy is so much greater, both in private and dispensary practice. The physician can calculate easier the quantity of the medicine necessary to last till his return, or the return of his patient, like a skillful caterer.

Cold Water Treatment of Typhoid Fever and Rheumatism.

Dr. EDES, in the Boston *Medical and Surgical Journal*, makes the following summary on this subject:—

Schols, in Bremen, has lost, since 1869, 5 cases in 125, that is, 4 per cent. Baths were given when the temperature rose above 39° C. (102.2° Fahr.) In severe cases, cold applications were made to the chest and abdomen. The chief contraindication to this treatment is intestinal hemorrhage. It is also but little applicable to those rare cases, mostly among habitual drunkards, where the disease, though presenting severe symptoms, is not characterized by a high temperature.

Bauer, in Munich, concludes that the mortality in general is diminished by the cold water treatment; that the mortality is increased by a disregard of the disease in its early stages, the want of regular, early, anti-febrile treatment, and by insufficient nourishment. Baths were given at 39.6° (in rectum), and ice bags applied. The baths were usually at 16° or 18°, or if the patient was very weak a longer one, at a higher temperature, was used.

Lissauer, in three army hospitals, observed a mortality from typhoid of 11 in 46, under an expectant treatment, and of 6 in 97 under the use of cold water. He considered that great advantage was derived from a combination of the cold water treatment with the use of quinine, according to Binz' plan, giving 1 gm. (15 grains) at night. In this way the remission of the fever was prolonged so that it was possible to get along with two, or at the most three, baths per diem.

Götz reports from the Vienna General Hospital that the mortality from typhoid under the expectant treatment was 28.72, under cold water treatment, 15.4. In typhus maculata, on the other hand, the corresponding figures were 17.97 and 28.16.

Brand criticises a report from Duchek's clinic, in Vienna, which was unfavorable to the cold water treatment, because the baths were not continued through the night, as they should have been. He says that it is not sufficient to bathe when the temperature reaches 39° C., but that the baths should be given often, and long enough to keep the

temperature between 37° and 38° (98.6° and 100.4° Fahr.), or within a few tenths of a degree of this limit. He thinks that the fever may thus be completely kept under, and, if the treatment is begun early enough, the mortality reduced to zero.

Riegel applied the cold water treatment in the Julius Hospital, at Würzburg, in a mild (?) form. The bath was warmed to 68° Fahr., and the patient allowed to remain therein ten minutes. Half baths were used, and colder water poured on from above. Baths were given when the temperature reached 103.1°, and in the intervals cold compresses were applied to the abdomen. In the years 1870 and 1871, of 156 patients with typhoid, only the severer cases being reckoned, only 7 died (4.4 p. c.). Before the introduction of the cold water treatment into the same hospital the usual percentage of mortality was 20 per cent. Riegel, like Jürgenson and Hagenbach, observed very frequently a severe burning pain in the soles of the feet, so that there seems to exist some connection between this symptom and the cold water treatment. Intestinal hemorrhage seemed no more frequent than under an expectant treatment, perhaps from the mild character of the hydrotherapeutics.

Dr. Kelly reports two cases of hyperpyrexia in rheumatism, in one of which, a man, the temperature gradually rose until death, while in the other, in which the temperature rose even higher, the cold pack was applied, by sheets continually wrung out of cold water, reducing the temperature in four and a half hours from 106.2° to 99.6°. Brandy was frequently given throughout the treatment. From this date the patient began to mend.

REVIEWS AND BOOK NOTICES.

NOTES ON BOOKS.

Dr. WALTON is about bringing out a work on the Mineral Springs of the United States, especially New York, Pennsylvania, and Virginia.

The second part is announced, of Prof. A. COURTY'S *Traité pratique des maladies de l'utérus, des ovaires et des trompes considérées au point de vue du diagnostic et du traitement, contenant un appendice sur les maladies du vagin et de la vulve.*

The large *Dictionnaire de médecine et de thérapeutique médicale et chirurgicale* of MM. BOUCHUT and DESPRES has reached a second edition, with numerous additions and emendations.

BOOK NOTICES.

General and Differential Diagnosis of Ovarian Tumors, with Special Reference to the Operation of Ovariotomy; and Occasional Pathological and Therapeutical Considerations. By WASHINGTON L. ATLEE, M. D. With 39 illustrations. Philadelphia: J. B. Lippincott & Co. 1872. pp. 482.

The profession throughout the United States will be glad to welcome this volume, the result of years of assiduous and extended study of the class of diseases of which it treats. No other man in the United States, probably no other man anywhere, has had such experience in the operation of ovariotomy as Dr. Atlee. As he remarks in the preface, he commenced the study of the subject, and long continued to practice the operation, when the whole medical world denounced and opposed it; when there was no literature on or teacher of it; and when he had nothing but the book of nature to instruct him, and the consciousness of right to sustain him.

He now undertakes to sum up in two volumes the rich results of his many years of observation and experience. The first of these, on the differential diagnosis of abdominal tumors, is that before us; the second, comprising cases and their surgical management, will be issued as soon as the author's engagements will permit.

The work commences with the general diagnosis of ovarian tumors. The signs laid down are illustrated copiously by cases drawn wholly from the author's own experience, and often aided by outline sketches.

The second section is on differential diagnosis, which occupies much the larger portion of the book. The numerous instances adduced of mistaken diagnosis, even in the practice of skilled physicians, prove most forcibly how much a treatise of this kind is needed. One example may serve to show this: (Case CXXX). Last year, at the meeting of the Medical Association in San Francisco, Dr. Atlee was asked to see a patient in the Woman's Hospital, supposed to have ovarian tumor. He learned that Dr. STORER, of Boston (editor of the *Gynecological Journal*), had examined the patient, had agreed with the surgeon in charge, and they had fixed on an early day for the operation. Yet it was simply a case of unusually fat abdomen! She was perfectly healthy, and

there was no tumor of any kind! Of course, no operation was performed.

A very valuable chapter in the work is one on dropsical fluids of the abdomen; their physical properties, chemical analysis, microscopic appearance, and diagnostic value. This has been chiefly prepared by Dr. THOMAS M. DRYSDALE, who has assisted Dr. Atlee in several hundred operations. It contains a series of researches, most carefully conducted, quite without precedent in medical history.

In this work we have an unusual amount of original matter; in fact, it is altogether drawn from the author's long and carefully studied experience. In this respect it is almost unique, and is an honor to independent American surgery.

The Science and Practice of Medicine. By WILLIAM AITKEN, M. D., Edin., etc. Third American, from the Sixth London Edition, greatly enlarged, remodeled, carefully revised, and many portions re-written; adopting the new nomenclature, and following the order of classification of diseases prescribed by the Royal College of Physicians of London. With additions by MEREDITH CLYMER, M. D., etc. In two volumes, with steel plate, map, and 180 wood-cuts. Philadelphia: Lindsay & Blakiston, 1872. Price, cloth, \$12.00.

As will be learned from the above compendious title, this edition of Aitken's "Practice" is far in advance of previous ones in adaptation to the wants of the physician. The additions increase the size of the work nearly one-third, and the alterations are so many that they, together with the new arrangement of diseases, make it, to all intents and purposes, a new production.

Those parts where the most material changes have been made are on the topics relative to pathology and morbid anatomy, and in the sections on the prevention and treatment of diseases. All the more recent advances in therapeutics, which are recognized as of established merit, are embodied, and careful descriptions of the various novel means of diagnosis, such as the sphygmograph, etc., are included.

The American editor, on his part, has devoted his usual conscientious care and

well-known ability to filling up whatever lacked in the original work, to adapt it to the special wants of medical men in this country. His articles are upon a large variety of subjects, and represent almost exhaustively the contributions of our professional writers to modern practice.

New Treatment of Venereal Diseases and of Ulcerative Syphilitic Affections by Iodoform. Translated from the French of Dr. A. A. IZARD, by HOWARD F. DAMON, M. D. Boston: James Campbell, 1872. Paper, 8vo, pp. 73. Price 50 cents.

The author of this monograph collected his facts while interne at the Hôpital du Midi, where he witnessed an extended employment of iodoform as a topical application in soft chancre, syphilitic glandular involvement, and syphilides. Its special value, he considers, is that it produces, more certainly and promptly than any other therapeutic agent, the cicatrization of ulcerative syphilides. Moreover, it is a local anaesthetic of considerable power, and relieves the soreness and pain which accompany these lesions. No claim is laid to any general effect on the constitution; hence its employment in hard chancre (our author is a pronounced dualist) is confined to its action as a resolvent and anaesthetic. Internal treatment should not be dispensed with. In other words, iodoform is a valuable assistant in healing syphilitic local lesions, but is not put forth as a remedy for the disease.

These statements, it will readily be conceded, are of value and interest, and we recommend the work to those who would read a judicious monograph on syphilitotherapeutics.

Epidemic Cerebro-Spinal Meningitis. With an Appendix on some points on the Causes of the Disease, as shown by the history of the present epidemic in the city of New York. By MEREDITH CLYMER, M. D., etc. Philadelphia: Lindsay & Blakiston, 1872. 12mo, cloth, pp. 59. Price \$1.

This is a reprint, with a few additions and corrections, of the author's essay on the disease, inserted in the American edition of Dr. ATKEN'S *Science and Practice of Medicine.* From the prevalence of the disease at present in New York City and several other localities in the United States, it will doubt-

less be a useful and acceptable publication. The author has added a short history of the present epidemic in New York city, and attached to the volume a map of the city, showing its presence most frequently in houses constructed on made land, over spots where marshes formerly existed.

In the present epidemic the cases have been chiefly among children, and can generally be traced directly to the cause above adverted to, or other unsanitary conditions. No evidence of contagion or infection could be discovered. The mortality was high. Between January 1 and June 30 790 cases were reported, and 607 deaths. It is easily seen from this that treatment was of little moment.

HysteroLOGY; a Treatise, Descriptive and Clinical, on the Diseases and Displacements of the Uterus. By EDWIN NESBIT, CHAPMAN, M. A., M. D., etc. New York: William Wood & Co., 1872. 1 vol., cloth, 8vo, pp. 504.

We have already given to our readers in THE REPORTER some of the interesting results in uterine treatment at which Professor CHAPMAN has arrived in the present work. A careful examination of his volume confirms us in the high opinion we had already formed of it as a treatise based on original research and carefully classified observations. His conclusions are drawn from his own clinical experience, and commend themselves by their moderation, freedom from hobbyism, and the clear and precise language in which they are expressed.

The general doctrine which the author advocates in reference to uterine diseases is, that they arise from a perversion of the physiological congestions to which the genital organs are especially prone, from a physiological to a pathological state. He shows by a series of proofs that morbid congestion and not inflammation is present in most cases of uterine disease.

Hence his classification of these diseases is into a series of congestions, anatomically defined, either active or passive, and occurring either in nulliparae or multiparae.

Over three hundred and fifty cases are given, in more or less detail, and a summary of them added toward the close of the work. The last chapter, on treatment, is thoroughly sound and practical. Various illustrations are added, and the manufacture of the book is throughout satisfactory.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, OCT. 5, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

If Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

If To insure publication, articles must be *practical, brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

If Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

ATROPIA AND MORPHIA AS ANTAGONISTIC.

The question of the effects of full or toxic doses of morphia and atropia, when administered simultaneously or in rapid succession, occupied considerable attention in the medical world last winter, in connection with the trial of Dr. MEDLICOTT for the alleged murder of Mr. RUTH. A number of opinions of various experts were quoted in the last number of our HALF-YEARLY COMPENDIUM, where the reader can see how discrepant they are.

The July number of the Dublin *Journal of Medical Science* contains a case illustrating the general physiological antagonism of the two alkaloids, as read before the Medical Society of the College of Physicians of Dublin by Dr. JAMES FINNY. He administered to a Miss C., by the hypodermic syringe, $\frac{1}{2}$ grain acet. morphine and 1-25 grain sulph. atropine, using a double dose of the latter, under the impression it was weak. He chose the mixture because he finds it diminishes the tendency of the morphia to nauseate, and produces more complete anodyne effects.

In about twenty minutes the patient com-

plained of great cold, and shivering. The tongue and throat were dry, and swallowing difficult; speech thick, vision dull, pupils dilated; pulse small, and 130; respiration 32, and shallow.

Dr. FINNY proceeds:—

"The case was evidently one of atropism, produced by an over-dose of the alkaloid, as it now was evident that my solution, in spite of the floating bodies, was as strong as before, and that instead of 1-50 grain I had injected 1-25 grain at the least. Hoping the ill effects would not become worse, but would shortly pass away, I remained beside her to watch the result; but, instead of becoming better, instead of the symptoms diminishing and sleep ensuing, I soon saw the case change from one of simple interest into one of no small anxiety to me.

"In about ten minutes, in addition to the above enumerated symptoms, she evidenced great uneasiness, tossed about, flexing and extending her arms and legs; she now became delirious, talking on various subjects, being quite unaware of my presence, and imagined several persons to be in the room, giving directions to them on various domestic matters. She grasped at imaginary objects in the air; and from, no doubt, the parched state of her throat, frequently attempted to pass her finger to the back of the throat, and nearly succeeded, on one or two occasions, in producing vomiting. She also seemed inclined to get out of bed, but was easily restrained. The pulse still kept high, and though the extremities were not quite so cold, I thought things were quite bad enough, and determined, without further delay, to send for additional aid and advice. Before doing so, however, the thought occurred to me to try the effect of a dose of morphia as a general physiological antidote, as the recollection of cases of belladonna poisoning having been successfully treated on this principle by the President of the Royal College of Surgeons, during the time when I was a student in the Meath Hospital, flashed across my memory. (These cases I find, on reference, are fully detailed in the *Medical Press*, for 1862.)

"I accordingly injected—not indeed without considerable difficulty, owing to the delirious restlessness and tendency to pugnacity on the part of the patient— $\frac{1}{2}$ grain of the acet. morphia.

"The suspense which I had been in from the commencement of this alarming condition, and which now further augmented seemed to make minutes hours, was shortly relieved, as in less than five minutes, to my great delight, I observed the restlessness and jactitation cease, the skin to become warm, and the respiration fall to 20, while the pulse came down below 100, and was fuller. In a few minutes afterwards—ten altogether from the second injection—I was satisfied my patient was sound asleep, and in a fair way to spend a quiet night. After remaining in the house about half an hour longer, I took my leave, and in the morning I learned she had slept well, had taken a hearty breakfast, and that the neuralgia had entirely disappeared. After shopping for about an hour she visited me in my study in the afternoon; and with the exception of slight inconvenience arising from the still dilated condition of the pupils, she expressed herself as well as ever."

After referring to Dr. HARLEY's elaborate investigation of the subject, Dr. FINNY says that no other conviction is forced on his mind than that opium or morphia is directly antagonistic to belladonna. And so strong is this conviction, that should such another case (similar to that above detailed) come under his charge, he would at once, and with much confidence, resort to the hypodermic employment of morphia.

As to whether the converse be equally true—that belladonna be antagonistic to opium, and that cases of poisoning by opium may be successfully treated by belladonna—however much he is induced to accept it in theory, he does not think sufficiently affirmative evidence has been adduced from which to draw any decided conclusion on the subject.

TRIFLING WITH LIFE.

Some weeks ago we took occasion to criticise, with a too moderate tone we fear, the therapeutic nihilism advocated by a speaker before a Massachusetts Medical Society. Our readers may remember that the orator regretted that cases of disease were not left to themselves more, free from all

medication, so as to see "what will come of them."

This plan has been tried this summer in the Massachusetts General Hospital, and in the *Boston Medical and Surgical Journal*, Sept. 19, ten cases of rheumatism "without active treatment" are recorded; and we admire the audacious love of science which prompted the publication of that record.

The patients were chiefly young and middle-aged adults. Eight had never had rheumatism before, and of the remaining two, one had had but one attack. All that was given them for the disease was a few grains of citric acid at intervals, and some preparation of opium to relieve pain. We should think the results obtained would be very valuable, if physicians will but interpret them correctly.

Out of these ten cases, two (*twenty per cent.*) died; out of seven in which the heart was examined, it became diseased in *three*: the average duration of the disease was a little short of six weeks. Neither of the fatal cases had ever suffered from the disease before. The cause of death was diarrhoea and exhaustion; although the fact that in one case, on the day of death the patient had *twelve* grains of morphia injected subcutaneously within three hours and a half, the last dose being three grains, may offer sufficient reason in itself for such a termination. In this case the pericardial cavity was completely obliterated by recent yet quite firm adhesions, which could be separated, and left a thick, rough, opaque and somewhat hemorrhagic pericardium. The heart was pale and anemic, the muscular structure sufficiently firm.

The convalescence in the cases that got well is described as "slow," "gradual," "lasting a long while," and "even and favorable."

Let us hope that this trial of "the expectant treatment" in acute articular rheumatism will be extensively read and pondered upon. We aid in giving it publicity

for that purpose. We want it to be the last of experiments in that direction.

Probably of all very painful diseases there is no one where intelligent and real treatment is more palpably and promptly beneficial than in this one. It is actually robbed of its terrors by modern therapeutics. As Dr. CHAMBERS says, it is one which it is a positive pleasure to treat, for we can effect so much comfort and secure such safety. And with all this at command, to witness once one-fifth of the cases die, nearly a half convalesce with diseased hearts, and an average of six weeks' sickness all round, ought to be enough for one generation of doctors to demand from therapeutic nihilism.

THE LABOR QUESTION IN ONE OF ITS SANITARY ASPECTS.

Whether any good can come of the reiterated demand of able-bodied adult workmen for constantly less work and more pay is gravely doubted. Every business where success depends upon personal endeavor requires, at least, ten hours a day of close application; and this much it does not hurt most men to give.

But when it comes to exacting labor from minor children, from undeveloped muscles, and soft bones, we must be governed by quite other considerations. Undoubtedly, France, which owes so much wealth and prosperity to its manufactures, also owes to them, that is, to the excessive labor of her children in the workrooms, her recent defeats.

Her statistics of military recruiting inform us, that of 325,000 young men conscripted during one of the late years, 109,000 were discharged for want of stature, diseased spine, or constitutional weakness. What, in this diseased and feeble contingent, are the respective proportions furnished by the agricultural and the manufacturing districts? To every 10,000 conscripts fit for service in ten agricultural departments, there were 4029 rejected, whereas in ten

manufacturing departments the number of rejected was 9980. In the departments of the Marne, Seine-Inferieure and Eure, districts exclusively devoted to manufactures, the proportion has risen as high as 14,451 rejected to 10,000 thought fit for service.

The laws in that country do not prevent quite young children from being worked in the mills twelve to fourteen hours daily. Indeed, the mistaken policy has been to foster rather than to forbid the admission of children at a tender age into the labors of the loom and the furnace.

On the contrary, in Prussia, the legislation on this subject since 1837 has been definite and strict. Quite recently, in 1869, it was extended over the whole North German Bund. It decrees that children under twelve years cannot be regularly employed in mills; up to fourteen years they cannot work more than six hours, and must attend school three hours daily; from fourteen to sixteen years the day's work cannot be more than ten hours; the working hours must be between 5½ A. M. and 8½ P. M.; a rest of a half-hour in the morning, and of an hour in the afternoon, are obligatory, and during this time the children must take exercise in the open air; and the police is everywhere charged with the execution of the law.

How important such provisions are will readily be seen when we are told what toll these wretched little creatures are forced to undergo. Some years since, when this subject was discussed actively in England, Parliament ordered a commission which lasted four years. Grave facts were noticed. A pamphlet of the time, written by two Manchester deputies, contained startling revelations. The children were employed fourteen hours a day, from 6 A. M. to 8 P. M., winter and summer; they had to walk in the narrow space around their machines more than twenty miles every day; the heat of the factories was intense; the atmosphere they breathed was deleterious, and engen-

dered numerous diseases; of 269 children examined by a physician, 116 were sickly, and had their chests affected.

In consequence of this, a law was proposed by Sir James Graham, by which children under thirteen years are not allowed to work more than six and a half hours a day, either morning or afternoon, and three hours of school are necessary; children under eight years cannot be employed at all.

We have no facts at hand to show that any serious evil of this kind is rife with us; but with so striking an example of a nation so debilitated as France by devotion to industrial enterprise, without sanitary precautions, we should be on our guard.

NOTES AND COMMENTS.

Detection of Hydrochloric Acid in Cases of Poisoning.

J. BONIS proposes, in the *Comptes Rendus*, to heat the suspected liquid from the stomach, previously strained, with potassium chlorate, in presence of a fragment of thin gold foil. The acid, if present, will set free chlorine from the chlorate, which will attack the gold. The presence of this metal in the solution may be detected by stannous chloride. Bonis has proved that alkali-chlorides, even in presence of the organic acids of the gastric juice, have no action on either potassium, chlorate or nitrate.

Guaranine.

This is the active principle of Guarana, the fruit of the *Paulina sorbilis*, which has been lately introduced into the *materia medica* from Brazil. Mr. JOHN WILLIAMS read before the British Association for the Advancement of Science an improved method of obtaining it from the crude fruit. He is inclined to believe that guaranine differs in several important particulars from theine, with which it has been thought identical or nearly so.

Detection of Bismuth.

The substance is treated before the blow-pipe with equal parts of potassium iodide and flowers of sulphur; in the presence of bismuth a scarlet coating of bismuth iodide is formed.

Mathematical Law of the Pulse.

Mr. A. H. GARROD, of London, has recently submitted the facts relating to the circulation of blood in man to a mathematical analysis. We extract from his work the following laws relating to the motions of the heart:—

Each cardiac revolution is divided into three parts, the systole, the diaspasis, and the diastole. The following law holds good regarding the length of these intervals.

1. The systole, together with the diaspasis, or in other words, the first cardiac interval, varies as the square root of the whole revolution.

2. The systole varies as the square root of the diastole.

3. The diaspasis is constant. It follows that the degree of cardiac nutrition varies directly as the systematic blood pressure, and as the square root of the diastolic time.

Hygienic Value of Flowers.

The old notion that odorous flowers are injurious to the health seems to have been overturned by some recent experiments of Professor MANTEGAZZA. He found that flowers with powerful perfumes, such as the hyacinth, heliotrope, mignonette, etc., develop large quantities of ozone, and hence he attributes to them great hygienic value in the purification of the air in marshy districts. It also appeared that flowers with fainter perfume produce less ozone, and those which are odorless none at all.

Sounds made by Fishes.

M. DUROSSIE presented to the Academy of Sciences, Paris, last June, a curious note on the power possessed by certain fishes of the genus *cottus* to emit sounds. He traces it to the muscular tremulation or "contractility of Wollaston," of the buccal muscles. This curious physiological property of muscular fibre has not been sufficiently studied by scientific men, and by some has been denied. These fishes, we may add, are of the kind popularly called toad fish, and are found also on the coasts of the United States.

The "Lunatics" of the Gospels.

Dr. LESSLIE thinks, from his examination of the Syriac and other versions of the Scriptures, that the "lunatics" mentioned in the New Testament were sleep-walkers, who were led to wander about by moonlight on the flat roofs usual in Oriental houses.

Oct. 5, 1872.]

Notes and Comments.

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Rules for Cold Bathing.

Dr. WALTON, in his recent work on Mineral Springs, gives the following

RULES.

1. The most favorable time of day for taking a cold bath is on rising in the morning, or about noon.

2. The stomach should be empty when the bath is taken.

3. Exercise moderately before entering the bath, and while in the bath; but the body *must not* be overheated on going into the water.

4. A cold bath should not be taken when fatigued.

5. The duration of a cold bath should not exceed five minutes.

6. The cold bath should be succeeded by friction of the surface with a coarse towel or flesh-brush.

7. If the cold bath is not followed by reaction, the duration has been too long, or cold bathing is not fitted for the individual.

8. The cold bath is not adapted to feeble or aged persons or infants.

9. Persons whose extremities or skin are usually cold should not use the cold bath.

10. Persons affected with *organic disease of the heart* should not take cold baths.

Succus Scapi Taraxaci.

Mr. H. BARTON read a short paper on "Succus Scapi Taraxaci" before the British Pharmaceutical Conference. Dissatisfied with the usual variable preparations of taraxacum, in 1862 he collected some flower stalks in full bloom, and expressed from them the juice; gratified with the result, the following year the experiment was resumed, *rejecting the flowers*, crushing only the stalks, and adding 25 per cent. of spirit; after some weeks the liquor was filtered from the very small deposit, the resulting preparation remaining bright, and retaining its characteristic taste. From that time to this the juice has been prepared much in the same way, with the exception that on one occasion the spirit was added, and the crushed stalks allowed to remain twenty-four hours before submitting it to pressure, but without any appreciable difference in taste or appearance. The memorandum for the present year gives a fair average produce, crushing 237 lbs. scapes or stalks, and 63 lbs. flower heads; from the former were obtained 123 lbs. 4 ozs. juice, and from the latter 24 lbs. 3 ozs. This last,

oil content varies at accepting dates and being inferior, is kept separate. Judging from the remarks of medical men and others who have taken it, the author of the paper has reason to believe that succus scapi taraxaci (entirely rejecting the flowers) is certainly one of the best, most uniform, and readily obtainable preparations of taraxacum.

Antidote for Arsenic.

Prof. CARLES found that sugar rendered the arsenite of magnesia soluble, and thus counteracted the desirable reaction of the magnesia. It was also noticed that with the exception of arsenic, the sugar did increase the antidotal reaction of the magnesia. A mixture of 2½ drachms of magnesia, 5 to 6 drachms of sugar, and 3 ounces of boiling water, is represented as being a very good composition of the antidote.

Rattlesnake Poison.

The poison of this reptile has been extracted while living, by Dr. HAYWARD, of Liverpool. Twenty drops was the average quantity yielded by each snake. It is of a straw color, thick and gummy, of acid reaction, readily soluble in glycerine and water, but precipitated by strong alcohol. Half a drop injected under the wing of a linnet produced death in three minutes.

What Instruments are Necessary?

A correspondent recently asked us this question. It is thus answered by a writer in an English exchange:—I have a profound conviction that a medical practitioner ought to possess a clinical thermometer, a stethoscope, microscope, and a uterine sound. He may do much successful work with these and brains, though he may add many other accessories.

Mixed Anesthetic.

Dr. C. P. WHITEHEAD, of Lake Providence, La., writes us:—

Having tried the "A. C. E."* anesthetic spoken of in your journal a few issues back, and being highly pleased with it, I feel it a professional duty to add a mite to the statistics of the compound.

I have used it four times since the article was published, for the extraction of teeth, and have seen it used once by Dr. BELL, for

* Alcohol, 1 part; chloroform, 2 parts, and ether 3 parts.

the same purpose. In every instance the patient came rapidly under its influence. In no case was there nausea. In no case was there any unfavorable symptom. In no case but one did it occupy more than ten minutes from the first inhalation until the patient was completely recovered. If I discover anything unfavorable in regard to it it will be promptly reported.

The London Hospitals.

Dr. E. H. TRENHOLME writes from London to the *Canada Medical Record* :—

The enormous hospital accommodation of this city cannot but be forcibly impressed upon the mind, and when we consider that by far the greater proportion of these are almost entirely supported by voluntary contributions, one cannot but be more surprised still that they are in successful operation. Medical men connected with these institutions tell me that there is scarcely a family in London but contributes largely each year, and that they consider the hospital subscription a debt of honor.

I would like to draw the attention of the people, as well as the profession in Montreal, not only to what I have said about the attending staff, but particularly to the rules governing the period of tenure of House officer, viz., to three months.

The supporters of hospitals here seem to take a more extended view of the subject than elsewhere. The entire and only object of such institutions with them does not seem to be the present relief of the inmates, but, with a wise forecast, to prepare, as best they may, a large number of medical men who, after practical acquaintance with disease in the hospital, shall go out prepared for their life work.

Prediction of Sex in Utero.

Dr. T. J. HUTTON, of Long Island College Hospital, Brooklyn, New York, reports, in the *New York Medical Journal*, seven cases in which he was able to diagnose correctly the sex, part presenting, and position, by auscultation. The rule employed was a modification of those advanced in recent text-books, viz.: foetal pulsations heard below a horizontal line dividing the uterus into two equal parts denote *vertex presentation*; above it, *breech presentation*; below this line, and to the left, first position; below it, and to the right, second position. When the foetal pulsations number 144 a

minute it is a female; 124 a minute, male. A variation of six beats upward from 124, or downward from 144, will not endanger the diagnosis, provided auscultation be practiced in the *ninth month of pregnancy*. The seven cases were the only ones in which the Doctor had an opportunity of testing it, being the sole guide, and without a failure.

Is Alcohol a Tonic?

As regards the *strengthening* properties of alcohol, the late Dr. William Brinton, of London (1861), settles this point in the following terms: "Careful observation leaves little doubt that a moderate dose of beer or wine would, in most cases, at once diminish the maximum weight which a healthy person could lift; mental acuteness, accuracy of perception, and delicacy of the senses, are all so far opposed by alcohol as that the maximum efforts of each are incompatible with the ingestion of any moderate quantity of fermented liquid. A single glass will often suffice to take the edge off both mind and body, and to reduce their capacity to something below their perfection of work." This has the more force, as not only was Dr. Brinton probably the very highest authority on the physiology and pathology of the digestive organs, but he was also so far from being a "teetotaller" that he followed the English custom of always having wine on his dinner-table.

Thapsia Resin.

A study of the plant producing the Thapsia resin, lately so much employed in France, has induced M. CAUVET to recognize in it the *σιλετον* (hitherto supposed to be *assafetida*) of the Greeks, or *Laserpitium* of the Romans. The resin is an admirable counter-irritant, more effective than cantharides or croton oil, and it deserves the attention of our enterprising English pharmacists, to whom a novelty is a thing of value. The plant, *Thapsia gorganica*, grows abundantly on the sandy shores of Algeria, and the resin is commonly used as a vesicant and external stimulant by the Arabs, who call it *Bon Nata*, or the father of good.

Antidote Against Carbolic Acid.

TH. HUSEMANN recommends sugar-lime, prepared by dissolving 16 parts of white sugar in 40 parts of water, digesting with lime for three days, filtering and evaporating.

CORRESPONDENCE.

Vaginal Tumor.

EDS. MED. AND SURG. REPORTER:

While on a visit to my former field of labor in Union county, Pa., I was called to see Mrs. D., who was then said to be dangerously ill.

A short time previous to my arrival there was a large fibrous tumor expelled from the vulva.

On examination per vaginam, I found the uterus in its normal position; size, that of the unimpregnated viscus, the os being nearly closed.

Finding this state of things, I inclined to think this abnormal body was a vaginal growth, and not a uterine one.

Having expressed this as my opinion, the mother of Mrs. D. at once confirmed this opinion by saying that nine months ago something was coming from her, which was thought to be the womb. Dr. P. pushed it back, supposing it to be a prolapsed uterus.

Upon examination I found the monstrous thing was a fleshy, fibrous mass, cardiac in shape, vertical diameter five inches, transverse three and one-half inches, having two pedicles at its base, containing a dead foetus two inches long, cord eight inches, being located with its placenta at the base of the said mass or tumor.

Now, judging from its shape, the two pedicles, and the fact that nine months ago a fleshy mass was forced high up into the vagina, which remained there during these nine months, giving almost constant trouble and annoyance, the most rational solution of this singular case is, that the mass containing the dead foetus was expelled from the uterus into the vaginal canal (probably much smaller in size than now), retaining its vitality during these nine months by reason of the two pedicles whose distal attachments were in the uterine cavity, whence also was derived the nutriment by which the tumor was developed, the foetus having perished at the time of its expulsion from the uterus.

D. H. MILLER, M. D.,

Fifth and Coates streets.

Phila., Sept. 26, 1872.

NEWS AND MISCELLANY.

Midwifery in Russia.

It is stated that the Emperor of Russia has just issued a ukase ordering the immediate establishment at St. Petersburg of a school to train midwives, as up to the present time no such institution had existed anywhere in that immense empire. The curious part of the matter, however, is that the direction of this school is placed in the hands of the Minister of War, who, under date of the 10th of August, published the regulations of the institution and the programme of the studies. This anomaly results from the fact that the new school is subordinate to the Academy of Medicine and Surgery at St. Petersburg, which is also under the control of the War Department.

Small-pox on the Pacific Coast.

The Mayor of San Francisco has received a communication from the United States Consul at Callao in reference to the ravages of the small-pox on the South Pacific Coast. The Consul says the disease is more malignant and destructive to life than the ordinary small-pox, and that out of fifty-eight patients admitted in one week to the hospital in Santiago, Chili, fifty-six died. As there are eight or ten small-pox hospitals in Santiago, some idea may be formed of the destructiveness of the pestilence.

Prehistoric Man.

The Congress of Prehistoric Archaeology met last month (August) in Brussels. At its close M. de Quatrefages summarized the result of the discussions to be, principally, that the elements of the prehistoric populations, even of the age of stone, are discernible in the present population, and do not consequently point to any change in species.

THEOBROMIN has been found in a tea-plant which grows within the Himalaya Mountains. The leaves contained Thein and Theobromin.

Effect of Digitalis.

Dr. Edes, in the Boston *Medical and Surgical Journal*, says Bohm has reinvestigated the complicated subject of the action of digitalis. We have space only for his most important conclusions. Digitalin brings the inhibitory nerve centres situated in the heart into a condition of increased excitability. It has a peculiar specific action upon the heart-muscle itself, in the first stage strengthening its contractions, in the second making them irregular, and in the third bringing it to a condition of peculiar rigidity or tetanus. He thinks that the digitalin does not cause a contraction of the arterioles, but that the increased pressure in the arteries is due to the increased force of each pulsation of the heart.

Eight Children at a Birth.

The Boston *Medical and Surgical Journal* is responsible for the following:—

On the 21st of August, Mrs. Timothy Bradlee, of Trumbull County, Ohio, gave birth to eight children—three girls and five boys. They are all living, and are healthy, but quite small. Mr. Bradlee was married six years ago to Eunice Mowery, who weighed 273 pounds on the day of her marriage. She has given birth to two pairs of twins, and now eight more, making twelve children in six years. Mrs. Bradlee was a triplet, her mother and father being twins, and her grandmother the mother of five pairs of twins.

Health of the Port of Philadelphia.

The Quarantine Master at the Lazaretto, who took down his flag for the season on Monday evening, September 30, reports the season from June 1 to October 1 as the healthiest for many years, as there has not been a single case of serious illness or contagious disease at the station or brought into the port by any vessel.

Effect of Linseed.

Several physicians in the British *Medical Journal* record instances of idiosyncrasy where asthmatic symptoms are induced by the smell of linseed meal. Ipecacuanha is a frequent cause of similar symptoms.

MARRIAGES.

WHITAKER-YERKES.—September 18th, by Rev. A. J. Hay, at the residence of the bride's parents, Mr. Andrew E. Whitaker, of Hellertown, Pennsylvania, and Miss Annie M., only daughter of H. Yerkes, M. D., of Phonixville, Pa.

BARNWELL-CHAPMAN.—In Cincinnati, Ohio, September 2d, by the Rev. C. H. Taylor, D. D., Mr. W. E. Barnwell, of Philadelphia, and Miss Saida C., daughter of Dr. W. B. Chapman, of Cincinnati.

BAUMLEY-TOMPKINS.—At the residence of the bride's parents, Stony Point, New York, September 25, by Rev. Nelson Millard, Dr. John D. Baumley, of Newark, New Jersey, and Phebe, daughter of Hon. Daniel Tompkins.

JOHNSON-ROE.—At the bride's residence, Fulton, Oswego county, New York, September 11, Dr. Lawrence Johnson, of New York City, and Miss S. Addie Roe.

LONGWELL-ELLIOTT.—By Rev. T. J. Milford, September 5, Dr. L. C. Longwell and Miss E. J. Elliott, both of Union county, Pennsylvania.

OKIE-MICKLE.—September 4, by the Rev. Dr. Garrison, at the Church of the Epiphany, Camden, New Jersey, Richardson B. Okie, M. D., and Clara, daughter of the late Isaac Mickle, of Camden, N. J.

PATRIDGE-PLEASE.—In Charlotte, Vermont, September 11th, by Rev. C. O. Torrey, assisted by Rev. L. C. Patridge, H. T. Patridge, M. D., of New York City, and Miss Mary E. Pease, of Charlotte.

ROCKWELL-HAMILL.—At Utica, New York, September 12, by Rev. J. E. Rockwell, D. D., of Staten Island, Frank W. Rockwell, of Brooklyn, N. Y., and Lizzie T., daughter of C. Hamill, Esq.

TAYLOR-GRIER.—By Rev. J. Mateer, assisted by Revs. John Wray and W. H. Wilson, September 3d, Dr. J. A. Taylor, of Hamburg, Iowa, and Miss Hannah A. Grier, of Cullaville, Pennsylvania.

TORRY-MOSELEY.—At Cazenovia, New York, August 28th, by the Rev. G. S. Boardman, D. D., the Rev. David Torry, D. D., and Mrs. Georgiana Mosely, daughter of Dr. D. Mitchell, of Cazenovia.

DEATHS.

BARTRAM.—In Philadelphia, August 31st, Amie Griffiths, daughter of Doctor Thomas S. and Mary A. Bartram, aged 2 years and 22 days.

BLAKE.—At Long Branch, N. J., September 17, Dr. Lewis Blake, of Philadelphia, in the 46th year of his age.

Brooks.—In St. Johnsbury, Vermont, August 2, of dysentery, Walter Ellis, aged 9 months, son of Dr. S. T. Brooks.

CASE.—At Forestville, Connecticut, September 20, Augustus R. Case, M. D., aged 68.

COLEMAN.—At Latrobe, Pennsylvania, August 5, Edward Jenner, only son of Dr. W. C. and B. J. Coleman, aged 2 months and 17 days.

FLAGG.—On the 8th of September, Dr. J. F. B. Flagg, a distinguished dentist of Philadelphia, aged 68 years.

HENSCHEL.—At Zurich, Switzerland, on the 18th of September, Dr. Charles Henschel, of Philadelphia, in the 64th year of his age.

PEPPER.—In Philadelphia, September 14, George Pepper, M. D., in the 32d year of his age.

RIX.—In Royalton, Vermont, September 5, Levi Rix, M. D., aged 76.

ROGERS.—In Charlestown, Massachusetts, at the home of her son-in-law, Sherman Paris, Esq., Mary, wife of Dr. Samuel W. Rogers, late of Quincy, Illinois, aged 67 years.

RUMSEY.—On September 1st, at Wethersfield Springs, of typhoid fever, in the 23d year of his age, James Caverly Rumsey, only son of Dr. James S. Rumsey, of Fishkill, on Hudson.

SCHENCK.—At Matteawan, New York, September 7, Dr. John P. Schenck, Sr., in the 75th year of his age.

SIMMONS.—September 7th, Seward Gould, infant son of Dr. Charles E. and Ruby G. Simmons, aged 18 months.

WHITE.—In Loran, Illinois, August 31st, Mrs. White, wife of Dr. L. C. White, Mayor of Van Buren, Arkansas, aged 53 years. Mrs. White's death was caused by being thrown from a carriage, and receiving a fracture of the skull.

OBITUARY.

Dr. Jacob Tichenor.

At a meeting of the physicians of Owensboro, Kentucky, Dr. Hall being called to the chair, and Dr. Todd appointed Secretary, the following resolutions were passed in respect to the memory of Dr. Jacob Tichenor, who died at his residence, nine miles south of Owensboro, September 12th, of typhoid malarial fever, in the forty-second year of his age:—

Whereas, We have learned with regret of the death of our professional brother, Dr. Jacob Tichenor; therefore,

Resolved, That in his death the medical profession and the community have lost one of its most useful, benevolent, and esteemed members, who by his courtesy, gentlemanly deportment, and scientific attainments, had obtained an honorable position in his profession, and in the community in which he lived; in word, he was an estimable physician and a Christian gentleman.

Resolved, That in professional intercourse he was distinguished for ability, modesty, delicacy of feelings, and a faithful regard for ethical honor, rendering him eminently worthy of the respect and love of his brethren.

Resolved, That in acknowledging the excellency of him who is gone, and in honoring his memory, we would tender to his relatives and friends, in their sorrow, our respectful sympathy.

Resolved, That a copy of these resolutions be published in the city papers and the Philadelphia MEDICAL AND SURGICAL REPORTER.